

II. AMENDMENTS TO THE CLAIMS:

Please cancel claims 15 and 16 without prejudice.

The present listing of claims replaces all prior listings or versions of claims in the above-captioned application.

Listing of Claims:

1. (Previously Presented) A panel carrying device which carries a panel, comprising:

(a) a panel holding device that holds the panel;

(b) a second link mechanism connected to the panel holding device;

(c) a first link mechanism pivotally fitted to the second link mechanism;

(d) a slide mechanism that moves the first link mechanism in a panel carrying direction, wherein the slide mechanism comprises

i. a feed slide into which the first link mechanism is pivotally fitted; and

ii. a first translatable actuator that drives the feed slide in the carrying direction of the panel; and

(e) a swing mechanism that swings the second link mechanism, wherein the swing mechanism comprises

i. a swinging link mechanism pivotally fitted to the first link mechanism and the second link mechanism;

ii. a swing slide pivotally fitted to the swinging link mechanism; and

iii. a second translatable actuator that drives the swing slide pivotally fitted to the swinging link mechanism in the carrying direction of the panel,

wherein the first link mechanism is operable to swing back and forth in the carrying direction of the panel due to the slide mechanism and the second link mechanism is operable to swing back and forth in the carrying direction of the panel due to the first link mechanism,

wherein the first link mechanism and the second link mechanism swing back and forth in the carrying direction of the panel by changing a relative distance between the feed slide and the swing side in the carrying direction of the panel, and

wherein the first link mechanism and the second link mechanism move back and forth in the carrying direction of the panel by moving the feed slide and the swing slide in the carrying direction of the panel.

2. (Original) The panel carrying device according to claim 1, wherein on opposite sides of the panel holding device, a pair of first link mechanisms, second link mechanisms, slide mechanisms and swing mechanisms are arranged symmetrically with respect to each other.

3. (Previously Presented) The panel carrying device according to claim 1, wherein the second link mechanism includes an output member connected to the panel holding device, an intermediate member constituting an opposite side of the output member and two arms connecting the output member to the intermediate member, wherein the two arms constitute a parallel link.

4. (Original) The panel carrying device according to claim 3, wherein the first link mechanism includes two arms connecting the intermediate member to the slide mechanism.

5. (Cancelled)

6. (Previously Presented) The panel carrying device according to claim 1, wherein the slide mechanism moves the feed slide in the carrying direction of the panel while two arms of the first link mechanism are kept in parallel with each other.

7. (Previously Presented) The panel carrying device according to claim 1, wherein the slide mechanism individually drives two arms of the first link mechanism to move the feed slide in the carrying direction of the panel, and tilts the panel holding device.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) The panel carrying device according to claim 1, wherein the first translatory actuator of the slide mechanism and the second translatory actuator of the swing mechanism are arranged in parallel.

11. (Previously Presented) The panel carrying device according to claim 10, wherein the first translatory actuator of the slide mechanism and the second translatory actuator of the swing mechanism are selected from the group consisting of a ball screw and a ball nut, timing belts, hydraulic cylinders, a rack and a pinion, and linear motors.

12. (Previously Presented) The panel carrying device according to claim 2, wherein the first translatory actuator of the slide mechanism and the second translatory actuator of the swing mechanism are arranged in parallel.

13. (Previously Presented) The panel carrying device according to claim 1, wherein the first translatable actuator of the slide mechanism and the second translatable actuator of the swing mechanism are selected from the group consisting of a ball screw and a ball nut, timing belts, hydraulic cylinders, a rack and a pinion, and linear motors.

14. (Original) The panel carrying device according to claim 1, wherein the panel holding device includes a cross bar connected to the second link mechanism, and a work holding tool attached to the cross bar.

15. (Cancelled)

16. (Cancelled)